



## Original communication

## Suspicious child female deaths in Great Cairo and Giza during 2011–2012



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## ABSTRACT

Childhood mortality is a measure of a nation's health. A statistical analysis on suspicious child female deaths was done in two years period from 1st January 2011 to 31st December 2012. Its incidence was (4%) of all autopsied cases. The adolescent group (16–18 yrs) was highly involved 44 cases (27.5%). The majority of cases were known (82%) and they were from Great Cairo (60%) especially poor areas. Incidences were prevalent in March (15%), indoor (58%) and homicide was main manner in (42.5%) of cases. A relative was the main perpetrator in (50%) of homicidal cases. Wounds were observed in (43%) of cases. The head and neck regions were injured (50%) and signs of abuse were detected in (16%) of the studied cases. These results may be a guide for developing prevention policy.

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## 1. Introduction

A Child death is the death of a child or youth resulting from omission or commission acts.<sup>1</sup> It received a great deal of deserved publicity.<sup>2</sup> Although, child death is well recognized through the medical literature, its true prevalence is very difficult to assess.<sup>3</sup> Substantial misunderstandings exist among the world about its magnitude.<sup>4</sup> The most accurate statistical data of child deaths have been obtained from multi-agency death review teams presented in well developed countries.<sup>5</sup> The analysis of the this data in any civil society is the first step towards development to deal with it and to reduce its impact.<sup>6</sup> Unfortunately, child deaths victims' statistics are not vivid in the Egyptian public's mind.<sup>7</sup>

Violence against women and girls is a much more serious and widespread problem than previously suspected.<sup>8</sup> The female child violence is manifested through physical, sexual, psychological and economic abuse. The forms of female child violence vary according to their age. The most common form is intimate family-related violence, which at its most extreme ends in homicide.<sup>9</sup>

Day by day, homicidal incidence is changing due to its close relation to social and economic changes within a particular society.<sup>10</sup> Rapid rise in population, industrialization, high level of unemployment, depression in every day's life, prevalent economic,

social, political environment, insurgency, terrorism, drug addiction, and easy availability of weapons ... etc may increase the incidence of child deaths.<sup>11</sup>

In Egypt there are no true data about the incidence of child deaths including female ones. So, we aimed to ascertain the incidence, demonstrate other epidemiological and medico-legal characteristics of such cases in Great Cairo and Giza in 2011 and 2012, which in turn can help in generating a base of knowledge for monitoring and evaluating child deaths.

## 2. Material and methods

In this retrospective study 151 cases of suspicious child female deaths (SCFDs), that came for post-mortem examination to Authority of Forensic Medicine Administration, Ministry of Justice, Cairo–Egypt from 1st January 2011 to 31st December 2012, were autopsied according to attorney requests and included in the study.

SCFDs were considered if there was an evidence or suspicion of a crime, when the death was caused by external factors or if the identity of the deceased was unknown.

All female victims aged less than 18 years were selected as World Health Organization and the Egyptian laws consider the subject as a child up to 18 years.<sup>12</sup>

A retrospective archive review was performed on all selected cases. The results were analyzed in terms of number and demographic data of studied female child deaths as (age, socioeconomic status, residency, date, place of occurrence, type of injuries,

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cause, manner of death and relation to the perpetrators if homicide is suspected. Data of death reports were transferred into a basic data sheet as numbers and percentages. It is evaluated statistically using the SPSS version 15 (SPSS Inc., Chicago, IL, USA).

### 3. Results

Total numbers of 3824 medico-legal autopsies (including all age groups of both genders) were done during January 2011 to December 2012 period, Out of which 151 cases (3.9%) were SCFDs.

The percent of distribution of cases was 91 cases (60%) in Great Cairo, from whom 75 cases (82.4%) were known, and 60 cases (39.7%) in Giza, from whom 49 cases (87.5%) were known [Table 1, Fig. 1].

Maximum number of SCFDs was seen in Great Cairo and Giza especially in their south parts 56 cases (37%) [Table 2, Fig. 2]. This was during March 23 cases (15%) followed by, June and September 17 cases (11%) for each [Table 3, Fig 3]. Age group of 16–18 yrs was the most affected group, 44 cases (29.4%) followed by 1–5 yrs, 34 cases (22.5%). The least affected age group was 11–15 yrs (14.6%) [Table 4, Fig. 4].

The low socioeconomic status was prevalent in more than one half cases 84 (56%) [Table 6, Fig 6].

Majority of SCFDs was found at home (indoor) 88 cases (58%) followed by outdoor 42 cases (28%) [Table 5, Fig. 5].

Homicide was the main manner in the present study 64 cases (42.5%) followed by accidental deaths, 55 cases (36.4%) [Table 7, Fig 7].

In homicidal cases 64 cases (42.5%), the perpetrators were identified in 48 cases (75%). The majority of known perpetrators were the child's relative and neighbors in 38 cases (58%). The parents were the main child's relative assailant present in this study 19cases (59.3%). The assailant were foreigner in 11cases (17%) [Table 8 and Figs. 8 and 9].

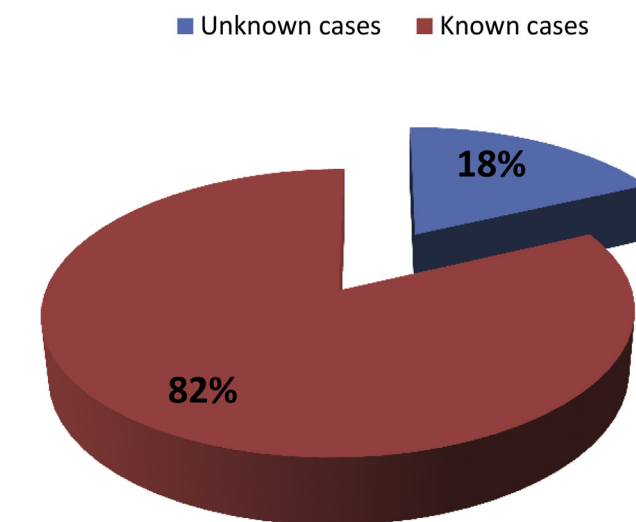
In contrast, suicidal manner presented in 26 cases (17.5) of the cases [Tables 7 and 8 and Figs. 8, 9].

As regard the cause of death, wounds were the commonest in 65 cases (43%), followed by asphyxia in 24 cases (16%), pathological causes in 21 cases (13.5%), poisoning in 19 cases (12.5%) and Burns in 9 cases (5.5%) [Table 9]. Regarding the type of wound, lacerated wounds were the commonest type in 22 cases (33.8%) followed by firearm wounds in 19 cases (29.2%). Concerning asphyxia, smothering was the main type of asphyxia presents in 7 cases (29%), followed by hanging and strangulation each present in 5 cases (20.8%), drowning in 4 cases (16.6%) then throttling and choking present in 2 cases (8.3%), 1 cases (4.1%) respectively. Analysis of toxicological cases showed that, 8 (42%) of poisoning cases were by Organophosphorus, followed by carbon monoxide intoxication 7 cases (36.8%) and a drug of addiction was present in 4 cases (21%) [Table 10].

Analyzing the site of trauma is showed that, multiple trauma sites were the commonest form present in this study 39 cases (40%). Head was the region where maximum number of injuries were observed, 29 cases (30%) followed by the neck 19 cases (20%) [Table 11]. Signs of physical abuse were observed in only 7 cases

**Table 1**  
Distribution of suspicious female deaths according to their identity.

	Giza		Total	Cairo		Total	Total
	2011	2012		2011	2012		
Total number of the female child victims	24 (15.8%)	36 (23.8%)	60 (39.7%)	40 (26.5%)	51 (33.8%)	91 (60.3%)	151*(100%)
Known No (%)	21 (87.5%)	28 (78%)	49 (81.6%)	31 (77.5%)	44 (86%)	75 (82.4%)	124 (82%)
Unknown No (%)	3 (12.5%)	8 (22%)	11 (18.3%)	9 (22.5%)	7 (14%)	16 (17.6%)	27 (18%)



**Fig. 1.** Distribution of cases according to their identity.

**Table 2**  
Distribution of victims according to their residence.

Area	Giza		No (%)	Area	Cairo		No (%)
	2011	2012			2011	2012	
North	8	18	26 (43%)	North	4	10	14 (15%)
South	16	18	34 (57%)	South	14	8	22 (24%)
Total (No)	24	36	60	East	9	10	19 (21%)
%	40%	60%	100%	West	8	13	21 (23%)
				Middle	3	5	8 (9%)
				Different areas	2	5	7 (8%)
				Total (No)	40	51	91
				%	44%	56%	100%

(5%). While signs of sexual abuse were presented in 12 cases (8%) and signs of negligence were seen in 4 cases (3%) [Table 12].

### 4. Discussion

Childhood mortality is an important measure of a nation's health and a worldwide indicator of social well-being.<sup>13</sup>

Childhood injury is a major public health problem that requires urgent attention. It is a leading cause of child death and ill-health in low-income countries<sup>14</sup> Incidences of homicidal deaths are always increasing. The true incidence of fatal child injuries is unknown and needs multi-agency death review teams.<sup>15</sup>

An estimated 1570 children died as a result of fatal child maltreatment in the U.S. in 2011, which is equivalent to 2.10 deaths per 100,000 children.<sup>16</sup>

Egypt is considered a developing country with multiple societal unstable familial patterns of parent/female child interactions. Accumulation of the frustrations that go with unemployment,

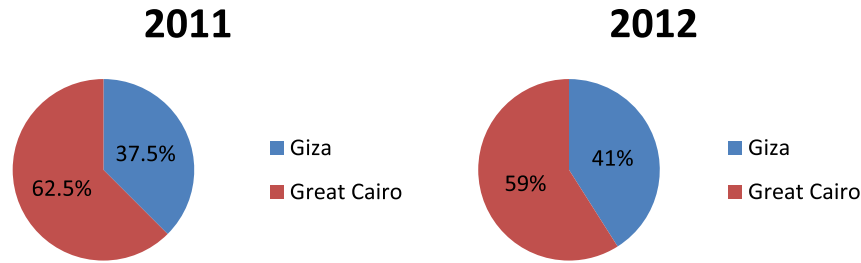


Fig. 2. Total number of female child victims according to their residence.

Table 3

Distribution of cases according to the date of the crime.

Month	Giza		Total (%) 60		Cairo		Total (%) 91		Grand total (%) 151 (100%)/ Month
	2011	2012	(100%)		2011	2012	(100%)		
January	1	—	1 (1.5%)	3	5	8 (9%)		9 (6%)	
February	—	7	7 (12%)	—	6	6 (7%)		13 (9%)	
March	6	7	13 (22%)	3	7	10 (11%)		23 (15%)	
April	3	3	6 (10%)	4	6	10 (11%)		16 (10%)	
May	—	1	1 (1.5%)	2	4	6 (7%)		7 (5%)	
June	1	3	4 (6.5%)	5	8	13 (14%)		17 (11%)	
July	2	2	4 (6.5%)	2	2	4 (4%)		8 (5%)	
August	4	1	5 (8%)	4	3	7 (8%)		12 (8%)	
September	3	4	7 (12%)	6	4	10 (11%)		17 (11%)	
October	2	7	9 (15%)	3	2	5 (5%)		14 (9%)	
November	2	1	3 (5%)	6	2	8 (9%)		11 (7%)	
December	—	—		2	2	4 (4%)		4 (3%)	

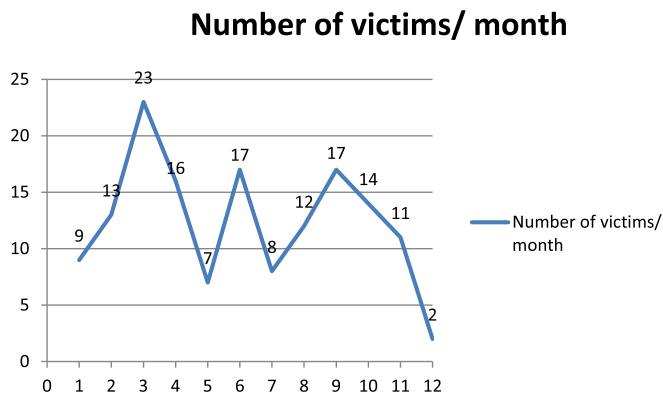


Fig. 3. Distribution of cases according to the date of the crime.

Table 4

Classification of female child victims according to their decades &amp; age group.

Age & decades	Governorate							
	Giza		Total	Cairo		Total	Total	
	2011	2012		2011	2012			
<1 year	3	8	11 (18.3%)	7	9	16 (17.5%)	27 (17%)	
1–5 years	8	2	10 (16.6%)	14	10	24 (26.3%)	34 (22.5%)	
6–10 years	2	9	11 (18.3%)	6	7	13 (14.2%)	27 (17%)	
Total number of 1st decade female child victims	<b>13</b>	<b>19</b>	<b>32 (53.3%)</b>	<b>27</b>	<b>26</b>	<b>53 (58.2%)</b>	<b>84 (56%)</b>	
11–15 years	4	5	9 (15%)	5	8	13 (14.2%)	22 (14.6%)	
16–18 years	7	12	19 (31.6%)	8	17	25 (27.4%)	44 (29.4%)	
Total number of 2nd decade female child victims	<b>11</b>	<b>17</b>	<b>28 (46%)</b>	<b>13</b>	<b>25</b>	<b>38 (41.7%)</b>	<b>66 (44%)</b>	
Total no	24	36	60	40	51	91	151	

illness, housing problems, poverty and low socio-economic status may lead to increase violence ending with child death.<sup>17</sup>

Egypt was identified as a region characterized by excess mortality among girl children<sup>18</sup>

Girls are more likely to be killed because of their perceived decreased societal value, leading to a marked imbalance in the male: female ratio.<sup>19</sup>

The present study showed that the number of deaths in Great Cairo and Giza during 2 years period from Jan 2011 to Dec 2012 was 3824; from which the number of autopsied SFCDs represented (3.9%) of total deaths, 82% of them were of known identity. These results showed a gap with results of another study done in Egypt which revealed that the total number of autopsied female children

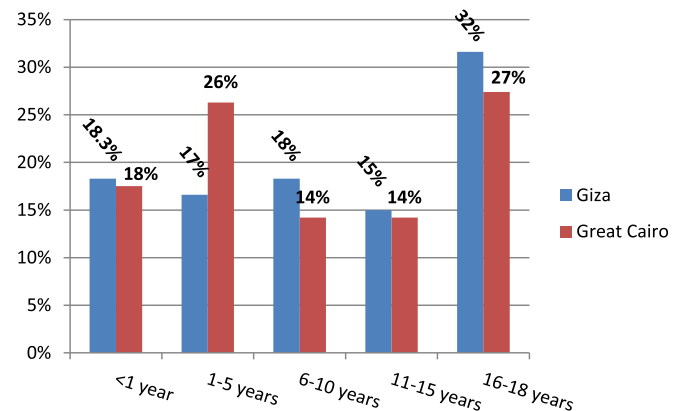


Fig. 4. Distribution of cases according to their age group &amp; residency.

Table 5

Distribution of victims according to socio economic status.

Class	Giza		No (%)	Cairo		No (%)	Grand total (%) 151 (100%)
	2011	2012		2011	2012		
Low	21	17	38 (63.3%)	17	29	46 (50%)	84 (56%)
Moderate	1	10	11 (18.4%)	11	12	23 (25.2%)	34 (22%)
High	2	2	4 (6.6%)	5	3	8 (8.7%)	12 (8%)
Undetermined	0	7	7 (11.6%)	7	7	14 (15.3%)	21 (14%)
Total no(%)	24	36	60 (100%)	40	51	91 (100%)	151

Table 6

Cases according to the place of female child death.

Place	Giza		Total (%) 60 (100%)	Cairo		Total (%) 91 (100%)	Grand total (%) 151 (100%)
	2011	2012		2011	2012		
Indoor	13	26	39 (65%)	24	25	49 (54%)	88 (58%)
Outdoor	4	9	13 (22%)	10	19	29 (32%)	42 (28%)
Hospital	3	1	4 (6.5%)	6	6	12 (13%)	16 (11%)
Undetermined	4	0	4 (6.5%)	0	1	1 (1%)	5 (3%)

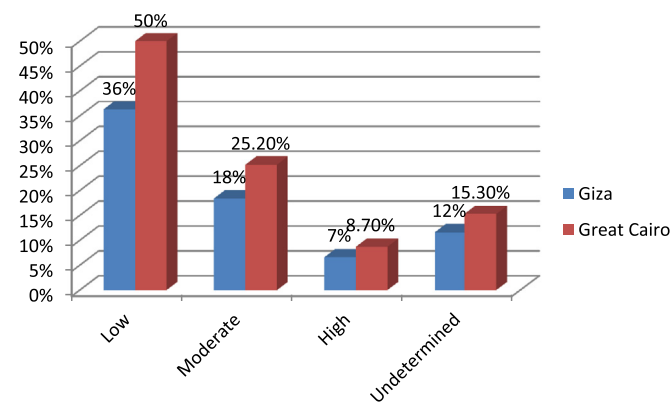


Fig. 5. Distribution of cases according to socio economic status.

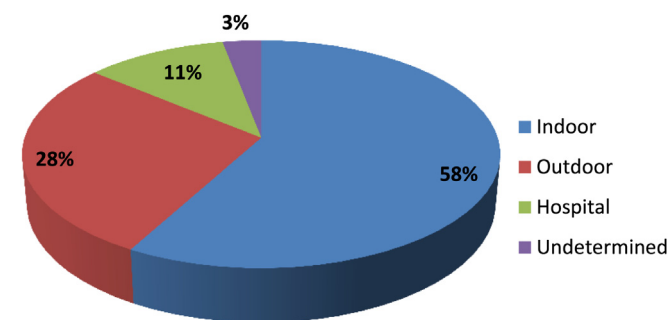


Fig. 6. Distribution of cases according the place of female child death.

in Port-Said and North Sinai during the period from 2000 to 2007 was 1% of the total autopsied deaths.<sup>7</sup> This may be due to increasing population numbers in regions where our study was held. On the other hand, the results on child deaths in Kansas, showed a preponderance of female child victims.<sup>20</sup>

The preponderance SFCDs were observed in 3, 6 and 9 months. This may be attributed to change of weather and seasons. Where as the study of Nadia and El-barrany<sup>21</sup> showed that most of homicidal female deaths occurred in December.

Also, the statistical analysis of this study showed that, the majority of victims (56%) were from rural areas (south area of Great Cairo and Giza) with low socioeconomic status. This finding was in agreement with these of.<sup>20,22</sup> This result is in contrast with the results of the study done by<sup>7</sup> which documented that the most of victims (73%) were observed in urban areas with moderate and high socioeconomic levels.

Similarly, Nadia and El-barrany<sup>21</sup> reported that most of homicidal female deaths were reported from overcrowded areas characterized by low socioeconomic standards. This may be explained by the fact that, the lower the socio-economic status, the more the increase in the parents' adverse attitude due to increase life stresses.<sup>7</sup>

**Table 7**  
Victims according to the manner of the crime.

Manner	Giza		Total (%)	Cairo		Total (%)	Grand total (%)
	2011	2012	60 (100%)	2011	2012	91 (100%)	151 (100%)
Suicidal	3	6	9 (15%)	6	11	17 (19%)	26 (17.5%)
Homicidal	11	19	30 (50%)	16	18	34 (37.5%)	64 (42.5%)
Accidental	9	11	20 (33.3%)	18	17	35 (38.5%)	55 (36.4%)
Malpractice	1	0	1 (1.6%)				1 (0.6%)
Undetermined	0	0	0	5	5	5 (5%)	5 (3%)

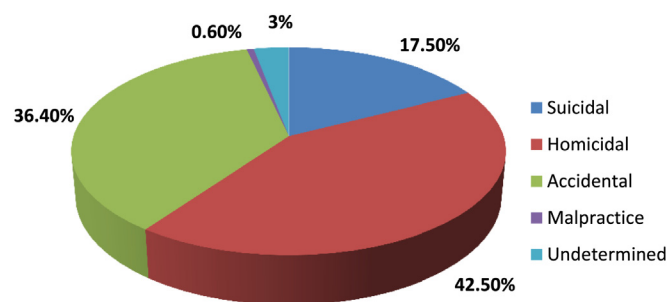


Fig. 7. Distribution of cases according to the manner of the crime.

The present work showed that, the commonest place of occurrence was indoor (58%). This finding was in agreement with those of.<sup>23,24</sup> As indoor is assailant's favorable atmosphere to commit homicidal acts and to execute it without being witnessed by others.

As regard the manner of suspected child female deaths, homicidal manner was the main manner (42.5%) followed by unintentional (accidental) manner (36.4%). These results contradict WHO report, that 90% of children killed by unintentional injuries. This report include road traffic accidents as a type of unintentional manner of child deaths.<sup>25</sup>

From the results of the current study, the highest percentage of child deaths was found in early youth, aged between 16 and 18 years, representing 29.4%.

We weren't in agreement with the results of the study done by El-Ellemi and Moustafa,<sup>7</sup> where approximately (41%) of the victims were less than 1 year old.

According to the (USDHHS),<sup>16</sup> children ages 0–3 years accounted for 82% of female child deaths, and children less than 1 year accounted for 42% of female child deaths in 2011.

This contradiction may be due to that infants killed shortly after birth can be in most of the situations “hidden” and not reported in vital official statistics if the birth was unattended or occurred out of the hospital.

In the present study, wounds constituted (43%) of total cases followed by asphyxia (16%), poisoning (12.5%) and burn (5.5%). These are in accordance with studies done in Egypt,<sup>22</sup> in Finland<sup>26</sup> and in the USA.<sup>27</sup>

This study was in same line with Nadia and El-barrany<sup>21</sup> who showed that, wounds constituted the majority of cases (48%) followed by asphyxia (23%) of cases.

Damashek and his colleagues,<sup>28</sup> studied child deaths including female child in the state of Oklahoma for 21 years, they reported that the largest number of deaths were due to injuries (26%) and asphyxia (17%). Other common causes of death were drowning (12%), firearm (5%), medical neglect (5%) and shaken baby syndrome (8%).

On the other hand the study of El-Ellemi and Moustafa<sup>7</sup> stated that, abandoned and neglected newborns were the most common cause of female child deaths (33%) followed by medical malpractice

**Table 8**  
The relation of assailant in homicidal female – child victims.

Assailant in homicidal crimes	Giza		Total (%)	Cairo		Total (%)	Grand total (%)
	2011	2012	30 (100%)	2011	2012	34 (100%)	64 (100%)
Relative	7	5	12 (40%)	9	11	20 (59%)	32 (50%)
Neighbor	—	4	4 (13%)	1	—	1 (3%)	5 (8%)
Foreigner	1	2	3 (10%)	3	5	8 (23%)	11 (17%)
Undetermined	3	8	11 (37%)	3	2	5 (15%)	16 (25%)

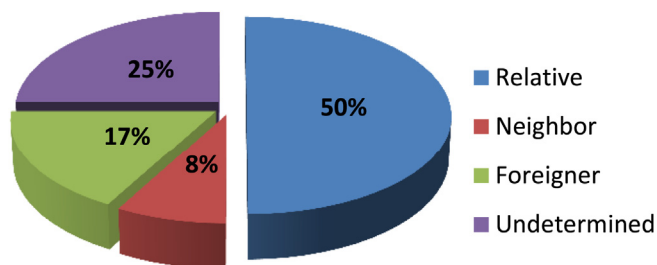


Fig. 8. Distribution of cases according to the relation of assailant to studied female – child victims.

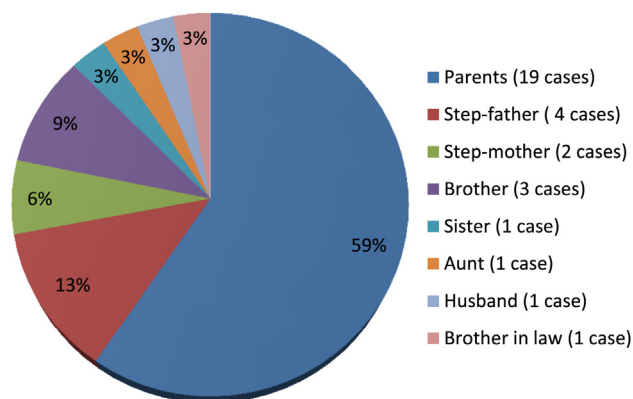


Fig. 9. Distribution of criminal cases according to the type of relative assailant.

and poisoning (15%) each, but blunt trauma presented in (12%) of cases.

However, results of our study were in contrast with another study carried out in Egypt which showed that the perpetrator was an unknown person in (45%), followed by colleagues and neighbors (22.5%), then by the first degree family member (9%).<sup>7</sup>

Children living in households with unrelated adults had 50 times the risk for fatal injury as did children living with two biological parents or a single parent only.<sup>29</sup>

Out of total child deaths reported by WHO,<sup>25</sup> (1.1%), (0.9%) and (0.7%) were due to drowning, falls and burns affecting girls children, respectively. The gender distribution of burns differs among countries this may be related to cultural practices, particularly with regard to cooking. Some African countries – including Egypt have a greater proportion of among girls, particularly teenage girls.<sup>30</sup> As regards poisoning, it was observed that boys have higher rates of fatal poisoning than girls in all regions of the world except the low-income and middle-income countries e.g. Egypt.<sup>25</sup> A study conducted in Egypt showed that medications were responsible for 31% of non fatal poisonings in children under 12 years of age, followed by cleaning agents, which accounted for 20%.<sup>25</sup>

Regarding the relation between the victim and the perpetrator, the present study showed that the highest incidence was a relative person (50%). These results are in the same line with a study done in Belgrade, in which more than half of the victims were killed by relative (69.4%).<sup>10</sup>

Damashek and his colleagues<sup>28</sup> stated that fathers were more likely to perpetrate physical abuse and mothers were more likely to perpetrate neglect.

Table 9  
Cause of death wise distribution.

Cause of death	Giza		Total (%) 60 (100%)	Cairo		Total (%) 91 (100%)	Grand total (%) 151 (100%)
	2011	2012		2011	2012		
Wound	11	18	29 (48%)	15	21	36 (40%)	65 (43%)
Asphyxia	5	5	10 (17%)	5	9	14 (15%)	24 (16%)
Burn	–	1	1 (1.5%)	6	2	8 (9%)	9 (5.5%)
Poisoning	4	5	9 (15%)	4	6	10 (11%)	19 (12.5%)
Pathological	2	3	5 (9%)	9	7	16 (18%)	21 (13.5%)
Surgical malpractice	1	–	1 (1.5%)	1	2	3 (3%)	4 (3%)
Complication of pregnancy& illegal abortion (obstetric causes)	1	–	1 (1.5%)	–	–	–	1 (0.5%)
Negligence	–	3	3 (5%)	–	1	1 (1%)	4 (3%)
Undetermined cause	–	1	1 (1.5%)	–	3	3 (3%)	4 (3%)

Table 10  
Distribution of the criminal causes of death among studied female child victims.

Type		Giza		Total (%)	Cairo		Total (%)	Grand total (%) 108 (100%)
		2011	2012		2011	2012		
Wound 65 (100%)	Firearm wound	3	7	10 (34.4%)	2	7	9 (25%)	19 (29.2%)
	traumata due to fall from height	2	2	4 (13.7%)	3	4	7 (19.4%)	11 (16.9%)
	Lacerated wound	4	4	8 (27.5%)	7	7	14 (38.8%)	22 (33.8%)
	Wound due to difficult labor	2	1	3 (10.3%)	–	–	–	3 (4.5%)
	Cut wound	0	2	2 (6.8%)	1	–	1 (2.7%)	3 (4.6%)
	Stab wound	0	1	1 (3.4%)	2	3	5 (13.8%)	6 (9.2%)
	Combined traumata	–	1	1 (3.4%)	–	–	–	1 (1.5%)
	Total	11	18	29 (100%)	15	21	36 (100%)	65 (100%)
Asphyxia 24 (100%)	Smothering	2	1	3 (30%)	1	3	4 (28.5%)	7 (29%)
	Throttling	1	0	1 (10%)	–	1	1 (7.1%)	2 (8.3%)
	Strangulation	1	2	3 (30%)	2	–	2 (14.2%)	5 (20.8%)
	Hanging	1	1	2 (20%)	–	3	3 (21.4%)	5 (20.8%)
	Drowning	0	1	1 (10%)	1	2	3 (21.4%)	4 (16.6%)
	Chocking	–	–	–	1	–	1 (7.1%)	1 (4.1%)
	Total	5	5	10 (100%)	5	9	14 (100%)	24 (100%)
Toxicological 19 (100%)	Co poisoning	3	2	5 (55.5%)	1	1	2 (20%)	7 (36.8%)
	Drug of addiction (tramadol, barbiturates)	1	1	2 (22.2%)	–	2	2 (20%)	4 (21%)
	Organophosphate poisoning	0	2	2 (22.2%)	3	3	6 (100%)	8 (42%)
	Total	4	5	9 (100%)	4	6	10 (100%)	19 (100%)



**Table 11**  
Distribution of injuries according to the site in the body.

Site	Giza		Total (%) 41 (100%)	Cairo		Total (%) 56 (100%)	Grand total (%) 97 (100%)
	2011	2012		2011	2012		
Head	6	6	12 (29%)	8	9	17 (30%)	29 (30%)
Neck	4	6	10 (24%)	3	6	9 (16%)	19(20%)
Chest	1	0	1 (2.5%)	2	3	5 (9%)	6 (6%)
Abdomen	0	0	0	1	1	2 (3.5%)	2 (2%)
Back	0		0	1	0	1 (1.5%)	1 (1%)
Genital organs	1		1 (2.5%)			0	1 (1%)
Multiple sites including head	6	11	17 (42%)	11	11	22 (40%)	39 (40%)

**Table 12**  
Female child cases showing signs of abuse.

Other signs with examination	Giza		Total (%) 60 (100%)	Cairo		Total (%) 91 (100%)	Grand total (%) 151 (100%)
	2011	2012		2011	2012		
Signs of physical child abuse	2	3	5 (8%)	5	2	7 (8%)	12 (8%)
Signs of sexual child abuse	1	1	2 (3%)	4	1	5 (5%)	7 (5%)
Negligence		3	3 (5%)		1	1 (1%)	4 (3%)

The current study showed that parents are the most frequent perpetrators of female child homicides (59%). Egyptian parents tend to use force in the form of beating to discipline the female child, particularly when the girl shows disruptive behavior, delinquency and disobedience at home or school. This could increase in severity and may lead to fatal outcome in low socio-economic families.<sup>31</sup>

Several studies, that examined physical abuse only<sup>32,33</sup> as well as both physical abuse and neglect<sup>34,16</sup> have found that the majority of female child deaths cases are perpetrated by one or more parents.

Reports from Turkey and Belgrade indicated that mothers are even more frequently the perpetrators of child homicides (70%, 52.2%).<sup>10,35</sup> While on the contrary, they are less common than the fathers who kill their children in developing countries such as Malaysia.<sup>36</sup>

The current study showed that the head and neck regions were injured in (30%) and (20%) of cases respectively. In penetrating injuries both chest and abdomen are presented with percentage of 6% and 2% respectively.

A similar results were reported by Okoye and Okoye<sup>24</sup> who found that the most common type of injury was abusive head trauma (42.9%). Choice of the site to be hit upon depends on the type of weapon used by assailant.

The current study showed that twelve in 151 female child deaths had documented signs of physical abuse, seven had signs of sexual abuse and four had signs of negligence. El–Elemi and Moustafa<sup>7</sup> stated that, signs of negligence were observed in (33%) of female child deaths.

The study of Damashek and his colleagues,<sup>28</sup> showed that a slight majority of deaths were caused by neglect (51%), rather than abuse (44%) and a smaller percentage were due to both abuse and neglect (5%).

Child abuse is an international phenomenon occurring in all socio-economic groups.<sup>37</sup> However, it is still underestimated and unreported due to poor collaboration.<sup>5</sup> This usually resulted in failure to explain the phenomenon of child abuse and deaths. Generally, the extent of child abuse and deaths in Arab countries is not well identified.<sup>7,38</sup> Obtaining accurate prevalence and details of child maltreatment and deaths cases is a challenge for many reasons; one of them is prevention of this phenomenon.

Prevention of child fatalities especially a female one is a recurring theme. Well-designed, properly organized child fatality review

teams, appear to be needed especially in low income countries, to offer hope for defining the underlying nature and scope of fatalities due to child abuse and neglect.<sup>39</sup>

From this study we concluded that the total number of suspicious deaths of female children over a 2-years period in the Great Cairo and Giza, Egypt was around 151 cases. Eighty % were of known identity. The majority of them were from rural areas, and adolescent group was mostly affected. The cause of death was wounds in 43% of deaths, and the head was considered the main site to be injured. Homicide was the main manner; the perpetrator was a relative in 50% of these cases. Incidence was higher in March. Most of the cases took place in-door. Implementation of forensic medicine in our country can reduce and prevent female child abuse and subsequent deaths.

#### Ethical approval

None.

#### Funding

None.

#### Conflict of interest

We are involved in.

1. Forensic Medicine education to medical students in our faculty.

2. Writing Forensic reports in Al- Kasr Al-Ainy hospital.

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